

578.1001

**UNITED STATES PATENT AND TRADEMARK OFFICE**

Re: Patentees: NAVARRO, Luis et al.

Patent No.: 6,398,777

Grant Date: June 4, 2002

Title: ENDOVASCULAR LASER DEVICE AND  
TREATMENT OF VARICOSE VEINS**REQUEST FOR CERTIFICATE OF CORRECTION**Assistant Commissioner for Patents  
Washington, DC 20231-9998

June 19, 2002

Dear Sir/Madam:

Pursuant to 37 CFR §1.322, patentee respectfully requests that a Certificate of Correction be issued without fee in connection with the above-identified patent. It is submitted that such correction is appropriate as the errors set forth below occurred through the fault of the U.S. Patent and Trademark Office.

Specifically, the Related U.S. Application Data should be set forth, listing the numbers and filing dates of the two Provisional Applications, namely, Provisional Application No. 60/119,235, filed on February 9, 1999; and Provisional Application No. 60/118,050, filed on February 1, 1999.

The facts are as follows. The data for both of the Provisional Applications was set forth in the records of the U.S. Patent and Trademark Office. A copy of a Corrected Filing Receipt issued in this application is enclosed herewith for your reference.

I hereby certify that this correspondence and/or fee is being deposited with the U.S. Postal Service as first class mail in an envelope addressed to "Assistant Commissioner for Patents, Washington, DC 20231" on June 19, 2002.

STEINBERG &amp; RASKIN, P.C.

By:

**APPROVED**

MAR 10 2003

BY THE DIRECTOR OF USPTO

Assistant Commissioner of Patents  
June 19, 2002  
Page 2

For some unknown reason, the Patent Certificate was issued without the numbers and filing dates of the Provisional Applications. A copy of the front page of the original Patent Certificate is enclosed herewith for your reference.

It is clear that the errors occurred through the fault of the U.S. Patent and Trademark Office, and therefore correction without fee is appropriate.

Kindly telephone the undersigned if any additional information or materials are required.

Please return the enclosed postcard to indicate your receipt of the above-referenced materials.

Respectfully submitted,

STEINBERG & RASKIN, P.C.

By:



Paul J. Higgins  
Reg. No. 44,152

STEINBERG & RASKIN, P.C.  
1140 Avenue of the Americas, 15th Floor  
New York, NY 10036-5803  
Telephone: (212) 768-3800  
Facsimile: (212) 382-2124  
E-mail: sr@steinbergaskin.com

PJH:jc

Encls.

cc: Martin G. Raskin, Esq. (w/o encls.)

PTO-103X  
(Rev. 8-99)FILING RECEIPT  
CORRECTED
 UNITED STATES DEPARTMENT OF COMMERCE  
 Patent and Trademark Office  
 ASSISTANT SECRETARY AND COMMISSIONER  
 OF PATENTS AND TRADEMARKS  
 Washington, D.C. 20231

APPLICATION NUMBER	FILING DATE	GRP ART UNIT	FIL FEE REC'D	ATTORNEY DOCKET NO.	DRWGS	TOT CL	IND CL
09/374,280	08/13/99	3737	\$890.00	634.0001USU	9	20	2

 CHARLES N J RUGGIERO  
 OHLANDT GREELEY RUGGIERO AND PERLE LLP  
 ONE LANDMARK SQUARE 9TH FLOOR  
 STAMFORD CT 06901-2682

Receipt is acknowledged of this nonprovisional Patent Application. It will be considered in its order and you will be notified as to the results of the examination. Be sure to provide the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION when inquiring about this application. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please write to the Office of Initial Patent Examination's Customer Service Center. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts of Application" ("Missing Parts Notice") in this application, please submit any corrections to this Filing Receipt with your reply to the "Missing Parts Notice." When the PTO processes the reply to the "Missing Parts Notice," the PTO will generate another Filing Receipt incorporating the requested corrections (if appropriate).

Applicant(s) LUIS NAVARRO, NEW YORK, NY; NESTOR NAVARRO, BARCELONA, SPAIN; CARLOS BONE SALAT, MALLORCA, SPAIN; JOAQUINA FRUCTUOSO GOMEZ, MALLORCA, SPAIN; ROBERT J. MIN, NEW YORK, NY.

## CONTINUING DATA AS CLAIMED BY APPLICANT-

PROVISIONAL APPLICATION NO. 60/119,235 02/09/99

PROVISIONAL APPLICATION NO. 60/118,050 02/01/99

IF REQUIRED, FOREIGN FILING LICENSE GRANTED 08/31/99

TITLE

ENDOVASCULAR LASER DEVICE AND TREATMENT OF VARICOSE VEINS

PRELIMINARY CLASS: 607

RECEIVED

JAN 21 2000

OH  
RUGGIERO & PERLE

DATA ENTRY BY: DURHAM, DESHAWN

TEAM: 06 DATE: 01/18/00

I HEREBY CERTIFY THAT THE INFORMATION CONTAINED HEREIN IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

(See reverse for new important information)



US0063.../B1

(12) **United States Patent**  
**Navarro et al.**

(10) **Patent No.:** **US 6,398,777 B1**  
 (45) **Date of Patent:** **Jun. 4, 2002**

(54) **ENDOVASCULAR LASER DEVICE AND TREATMENT OF VARICOSE VEINS**

(76) **Inventors:** Luis Navarro, 164 E. 71st St., New York, NY (US) 10021; Nestor Navarro, Manuel Girona 74, Barcelona (ES), 08034; Carlos Bone Salat; Joaquina Fructuoso Gomez, both of Santa Lavina, No. 7, Costa d'en Blane Calvia, Mallorca (ES), 07018; Robert J. Min, 2000 Broadway #8C, New York, NY (US) 10023.

(\*) **Notice:** Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) **Appl. No.:** 09/374,280

(22) **Filed:** Aug. 13, 1999

(51) **Int. Cl.** <sup>7</sup> ..... A61B 18/18

(52) **U.S. Cl.** ..... 606/7; 606/13; 606/14; 606/15; 607/89; 128/898

(58) **Field of Search** ..... 606/13-15, 7, 606/8; 607/88, 89, 92-94; 128/898

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

4,564,011 A \* 1/1986 Goldsm ..... 128/303.1  
 4,387,972 A 5/1986 Monette, Jr.  
 4,852,567 A 8/1989 Sinesky  
 5,053,033 A 10/1991 Clarke

5,161,526 A 11/1992 Hallwing et al.  
 5,304,171 A \* 4/1994 Gregory et al. .... 606/15  
 5,334,207 A \* 8/1994 Gay, Jr. .... 606/7  
 5,531,739 A \* 7/1996 Treles ..... 606/25  
 5,707,403 A 1/1998 Grove et al.  
 5,814,039 A 9/1998 Prescott ..... 606/7  
 5,840,008 A 11/1998 Klein et al. .... 600/3  
 5,855,563 A 1/1999 Kaplan et al. .... 604/49  
 5,984,915 A \* 11/1999 Leob et al. .... 606/9

**FOREIGN PATENT DOCUMENTS**

ES P9701586 7/1997

\* cited by examiner

**Primary Examiner**—Linda C. M. Dvorak

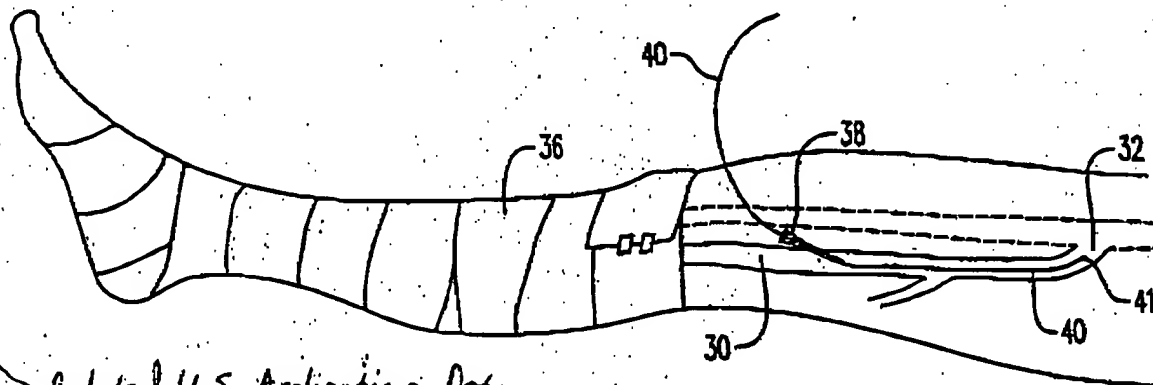
**Assistant Examiner**—Ahmed Farah

(74) **Attorney, Agent, or Firm**—Steinberg & Raskin, P.C.

(57) **ABSTRACT**

A method is disclosed for treating blood vessels using endovascular techniques to deliver laser energy. Percutaneous access into the vein lumen will be obtained using an angiocatheter through which a fiber optic line will be introduced. The vein will be emptied of blood using elevation of the limb, patient positioning, compression, or other means. Laser energy will be delivered into the vein lumen using wavelengths from about 532 nanometers to about 1064 nanometers. Sufficient power and duration will be used to damage the entire thickness of the vein wall, ultimately causing fibrosis of the treated blood vessel. Fibrosis of the treated blood vessel causes the blood vessel to decrease in diameter or collapse.

21 Claims, 9 Drawing Sheets



*Related U.S. Application Data*  
 Provisional Application No. 60/119,235, filed  
 on February 9, 1999; Provisional Application  
 No. 60/118,050, filed on February 6, 1999.